## Message

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Sent: 10/30/2017 7:10:08 PM

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Subject: DTS interim draft review of Parcel B Fill Units in draft Radiological Data Evaluation Findings Report

Attachments: Parcel B Fill Units 10.30.2017\_DTSC\_DRAFT.xlsx

## Hi Pat,

DTSC would like to provide you with an early indication of the fill units that are being recommended for resampling based on the EPA review of Trench Units. I have used both the Navy's resampling recommendations and the EPA's recommendations to date to determine which fill units will require resampling. I've prepared an Excel spreadsheet (attached). Currently approximately 85% of the Fill Units are now recommended for resampling. There are currently two trench units still under the review of the EPA. If these two trench units are recommended for resampling, then 100% of the fill units would be recommended for resampling as they were used to fill those trenches. If you have any questions, feel free to contact me.

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From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]
Sent: Friday, October 27, 2017 10:54 PM

To: Brooks, George P CIV <george.brooks@navy.mil>

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## Dear Pat,

Thank you for providing for review the draft *Radiological Data Evaluation Findings Report for Parcels B and G Soil*, Former Hunters Point Naval Shipyard, San Francisco, California, September 2017.

The Navy requested an early indication of which locations are higher vs. lower priority for resampling. In general, Parcel B data show less widespread signs of potential falsification. However, these data show, especially in earlier work, a greater likelihood for missing data and/or data quality concerns that make it difficult to conclude that ROD requirements have been met. Attached, is a spreadsheet showing observations we have noted on the 44 trench units reviewed thus far. The second column with an "overall score" indicates the following determinations:

- 2 = Sufficient evidence has already been found in the form, the FRED database, and/or other sources to conclude the resampling is necessary in this trench unit before EPA can conclude that the record supports that the ROD requirements have been met.
- 1 = More review is needed before EPA can conclude whether more resampling is necessary. More review may include, for example, further statistical tests to be run and completed soon.
- 0 = No indications have been found thus far for particular concerns in this trench unit. However, as the Navy wrote in Section 1.3 of this draft report, "Because it is impossible to determine whether every instance of potential data manipulation or falsification has been identified, the Navy recommends additional surveys and sampling beyond the areas with evidence of data manipulation. Additional soil sampling locations will be selected in coordination with the regulatory agencies." (Section 1.3, p. 1-2)

Below is a summary of results thus far (from the 2<sup>nd</sup> tab of the attached spreadsheet)

## Summary of EPA review of Parcel B Trench Units - Interim Draft 10-27-2017

	0/ - 5			
Number of TU's	% of			
	Parcel			
	В			
	total			
70	100%	Total trench units in Parcel B		
Navy reviewed 70 total Trench Units to look for signs of potential falsification				
2	3%	Navy recommended confirmation sampling		
	3%	due to signs of potential falsification		
2	20/	Navy recommended reanalysis of archived		
	3%	samples		
66		Navy recommended NFA = No further action		
	94%	due to signs of falsification, but potential		
		further action due to uncertainty		
EPA reviewed the 66 Trench Units recommended for NFA				
4	6%	EPA score 0 = No specific findings of		
	0%	particular concern		
3	4%	EPA Score 1 = Need further review		
37		EPA Score 2 = Need resampling before		
	53%	determination that the record supports ROD		
		requirements met		

22	33%	Not yet reviewed
Total Navy and EPA recommend for resampling		
39	56%	

In addition, EPA's statistician has run PCA analysis on "stubborn trenches" TU 50, 51, and 51A and did not observe any unusual patterns. She will run PCA on TU10 and TU125 next. She has also run other more detailed analysis in TUs 56, 61, 131 and 186. These are attached. The spreadsheet has a note in one of the last columns on the rows for these TU's that these analyses are included separately.

We will update the attached spreadsheet and submit other comments as our review continues. Please contact me at any time at 415-947-4187 if you would like to discuss these draft comments further.